

10-23-07

AT/s
ESW

Practitioner's Docket No. TRW(AEC)6781

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Dirk Lauhoff

Application No.: 10/686,980

Group No.: 3749

Filed: October 16, 2003

Examiner: G.A. Wilson

For: AIR VENT



Mail Stop Appeal Brief--Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF
(PATENT APPLICATION—37C.F.R. 1.192)

Note: The phrase "the date on which" an "appeal was taken" in 35 U.S.C. 154(b)(1)(A)(ii) (Which provides an adjustment of patent term if there is a delay on the part of the Office to respond within 4 months after an "appeal was taken") means the date on which an appeal brief under § 1.192 (and not a notice of appeal) was filed. Compliance with § 1.192 requires that: 1. the appeal brief fee (§ 1.17(c)) be paid (§ 1.192(a)); and 2. the appeal brief complies with § 1.192(c)(1) through (c)(9). See Notice of September 18, 2000, 65 Fed. Reg. 56366, 56385-56387 (Comment 38).

1. Transmitted herewith is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on August 20, 2007.

NOTE: "Appellant must, file a brief under this section within two months from the date of filing the notice of appeal under § 41.31.37 CFR 41.(a)(1). The brief is no longer required in triplicate. The former alternative time for filing a brief (within the time allowed for reply to the action from which the appeal was taken) has been removed. Appellant must file within two months from the notice of appeal. See Notice of August 12, 2004, 69 FR 49960, 49962.

CERTIFICATION UNDER 37 CFR §§ 1.8(a) and 1.10*
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Date: October 22, 2007

Deborah Denn

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*Only the date of filing (§ 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under § 1.8 continues to be taken into account in determining timeliness. See § 1.703(f). Consider "Express Mail Post Office Addressee" (§ 1.10) or facsimile transmission (§ 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.

2. STATUS OF APPLICANT

This application is on behalf of

☒ other than a small entity.

☐ a small entity.

A statement

☐ is attached.

☐ was already filed.

3. FEE FOR FILING APPEAL BRIEF

Pursuant to 37 § 41.20(b)(2), the fee for filing the Appeal Brief is:

☐ small entity \$255.00

☒ other than a small entity \$510.00

Appeal Brief fee due \$510.00

4. EXTENSION OF TERM

NOTE: 37 C.F.R. § 1.740(b) "...an applicant shall be deemed to have failed to engage in reasonable efforts to conclude processing or examination of an application for the cumulative total of any periods of time in excess of three months that are taken to reply to any notice or action by the Office making any rejection, objection, argument, or other request, measuring such three-month period from the date the notice or action was mailed or given to the applicant, in which case the period of adjustment set forth in § 1.703 shall be reduced by the number of days, if any, beginning on the date after the date that is three months after the date of mailing or transmission of the Office communication notifying the applicant of the rejection, objection, argument, or other request and ending on the date the reply was filed. The period, or shortened statutory period, for reply that is set in the Office action or notice has not effect on the three-month period set forth in this paragraph."

NOTE: The time periods set forth in 37 C.F.R. § 1.192(a) are subject to the provision of § 1.136 for patent applications. 37 C.F.R. § 1.191(d). See also Notice of November 5, 1985 (1060 O.G. 27).

NOTE: As the two-month period set in § 1.192(a) for filing an appeal brief is not subject to the six-month maximum period specified in 35 U.S.C. § 133, the period for filing an appeal brief may be extended up to seven months. 62 Fed. Reg. 53,131 at 53,156; 1203 O.G. 63 at 84 (Oct. 10, 1997).

The proceedings herein are for a patent application and the provisions of 37 C.F.R. 1.136 apply.

(complete (a) or (b), as applicable)

(a) ☐ Applicant petitions for an extension of time under 37 C.F.R. § 1.136 (fees: 37 C.F.R. 1.17(a)(1)-(5)) for the total number of months check below:

Extension (months)	Fee for other than small entity	Fee for small entity
<input type="checkbox"/> one month	\$ 120.00	\$ 60.00
<input type="checkbox"/> two months	\$ 460.00	\$ 230.00
<input type="checkbox"/> three months	\$1,050.00	\$ 525.00
<input type="checkbox"/> four months	\$1,640.00	\$ 820.00
<input type="checkbox"/> five months	\$2,230.00	\$1,115.00

Fee \$ _____

If an additional extension of time is required, please consider this a petition therefor.

(check and complete the next time, if applicable)

☐ An extension for _____ months has already been secured and the fee paid therefor of \$_____ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request \$= _____

or

(b) ☐ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

5. TOTAL FEE DUE

The total fee due is:

Appeal brief fee **\$510.00** _____

Extension fee (if any) \$ _____

TOTAL FEE DUE \$510.00 _____

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☒ Authorization is hereby made to charge the amount of **\$0.00** _____

☒ to Deposit Account No. **20-0090**.

☐ to Credit card as shown on the attached credit card information authorization form PTO-2038.

WARNING: Credit card information should **not** be included on this form as it may become public.

☒ Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.

A duplicate of this paper is attached.

7. FEE DEFICIENCY

NOTE: If there is a fee deficiency and there is no authorization to charge an account, additional fees are necessary to cover the additional time consumed in making up the original deficiency. If the maximum, six-month period has expired before the deficiency is noted and corrected, the application is held abandoned. In those instances where authorization to charge is included, processing delays are encountered in returning the papers to the PTO Finance Branch in order to apply these charges prior to action on the cases. Authorization to change the deposit account for any fee deficiency should be checked. See the Notice of April 7, 1986 (1065 O.G. 31-33).

☒ If any additional extension and/or fee is required,

AND/OR

☒ If any additional fee for claims is required, charge:

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SIGNATURE OF PRACTITIONER

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(type or print name of practitioner)

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PATENT

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DATE OF SIGNATURE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Dirk Lauhoff
Serial No. : 10/686,980
Filing Date : October 16, 2003
For : AIR VENT
Group Art Unit : 3749
Examiner : Gregory A. Wilson
Attorney Docket No. : TRW(FAS)6781

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APPEAL BRIEF

Sir:

Following the Notice of Appeal filed August 20, 2007, Appellants present this
Appeal Brief.

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I. REAL PARTY IN INTEREST

The real party in interest is TRW Automotive Electronics & Components GmbH & Co. KG. An assignment of this application to TRW Automotive Electronics & Components GmbH & Co. KG was recorded October 20, 2004, Reel/Frame: 015907/0331.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF CLAIMS

Claims 6-8 are currently pending in this application. Claims 6-8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0022616 to Stiehl (hereinafter, Stiehl). Claim 1-5 and 9-12 are canceled. The rejections of claims 6-8 are appealed.

IV. STATUS OF AMENDMENTS

An Amendment After Final Rejection was filed on July 11, 2007. No amendments to the claims have been entered after the Final Office Action of March 12, 2007. An Advisory Action dated August 8, 2007 indicated that the request for reconsideration did not place the application in condition for allowance. The Advisory Action maintained the rejection of claims 6-8.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 6 recites a vehicle body air vent comprising a frame 10 molded of a plastic material for mounting onto a vehicle body (Page 3, lines 16-19; Fig. 1) and an antenna with an antenna body 12 (Page 3, lines 19-24; Fig. 1). The antenna body 12 and the plastic material of the frame 10 are integrally molded by

injection-molding such that the antenna body 12 is embedded in and completely surrounded by the plastic material of the frame 10 (Page 4, lines 1-6; Fig. 1).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

- a. Whether the rejection of claims 6-8 under 35 U.S.C. 103(a) as being unpatentable over Stiehl is proper.

VII. ARGUMENTS

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). 35 U.S.C. § 103 forbids issuance of a patent when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” In making a determination of obviousness under 35 U.S.C.

§103(a):

...the scope and contents of the prior art are determined; the differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. Graham v. John Deere, 383 U.S. 1, 17-18, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1966).

Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. KSR Int’l Co. v. Teleflex Inc., 127 S. Ct. 1727; 2007 U.S. Lexis 4745, 36-37; 75 U.S.L.W. 4289; 82

U.S.P.Q.2d 1385, 1396 (2007) (emphasis added). Also, the U.S. Supreme Court in KSR Int'l. Co. V. Teleflex, Inc. noted that the analysis supporting a rejection under 35 U.S.C. 103(a) should be made explicit, and that it was "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements in the manner claimed." Id., 82 U.S.P.Q.2d at 1396.

A. Claims 6-8

Stiehl discloses an air vent 10, in particular for venting the interior of a vehicle. As disclosed at Paragraph [0017] of Stiehl. An antenna 62 is fitted to a frame 12 of the air vent 10. When fitting the antenna 62, a connecting cable 68 is guided through a mounting opening 60 in the frame 12. A protuberance on the antenna 62 is inserted into the mounting opening 60 to center the antenna on the frame 12. The antenna 62 is fixed to the frame 12 by means of three fastener points in the region of a recess 50, as well as by protrusions 70 on the antenna cooperating with latching tabs 46 on the frame 12.

1. The Stiehl reference does not teach or suggest all of the claim limitations of claims 6-8.

Claim 6 recites a vehicle body air vent that comprises a frame and that the antenna body and the plastic material of the frame are integrally molded such that the antenna body is embedded in and completely surrounded by the plastic material of the frame. There are several advantages associated with this feature, namely that assembly costs are reduced; tolerance problems are avoided; the component is safely attached to the frame of the air vent; the number of parts is reduced; there is a quality improvement through reduction of the production steps or sources of error; fewer tools can be used; the sealing on the vehicle body is improved; and the

antenna is well protected from deterioration by environmental influence. The Stiehl reference does not teach or suggest an antenna body and plastic material of a frame integrally molded such that the antenna body is embedded in and completely surrounded by the plastic material of the frame.

Stiehl discloses an antenna 62 that is fitted to the frame 12 by the protuberance being inserted into the mounting opening 60. The antenna 62 is fixed to the frame 12 by means of three fastener points in the region of recess 50. The antenna 62 is also fixed to the frame 12 by protrusions 70 cooperating with latching tabs 46 to form a latching connection. In fact, Fig. 1 of Stiehl shows that the antenna is fitted onto the frame and the side of the antenna facing away from the frame is exposed.

The antenna 62 disclosed in Stiehl, when inserted into the panel aperture in the vehicle is sandwiched between the plastic frame 12 and the vehicle in which the frame is mounted, as the Examiner has pointed out. However, the antenna of Stiehl is not surrounded by the plastic material of the frame 12 of the air vent, as recited in claim 6. The antenna 62 has the material of the frame 12 on one side and the material of the vehicle on the other side.

Further, claim 6 clearly recites that the antenna is completely surrounded by the plastic material of the frame. This results from integrally molding the antenna body to the frame. Hence, the antenna of the present invention is also protected from physical damage when it is not mounted in the vehicle. By contrast, as the Examiner has also pointed out, the antenna disclosed in Stiehl will be sandwiched between the plastic frame structure and the vehicle only when mounted to the vehicle.

Therefore, for the reasons set forth above, the rejection of claim 6 under 35 U.S.C. 103(a) fails to establish a prima facie case for obviousness, because the Stiehl reference does not teach or suggest all of the claim limitations of claim 6.

2. There is no reason that would have prompted a person of ordinary skill in the relevant field to modify the Stiehl reference to include the subject matter recited in claim 6.

There is no reason that would have prompted a person of ordinary skill in the relevant field to modify Stiehl to provide that an antenna body and the plastic material of the frame are integrally molded such that the antenna body is embedded in and completely surrounded by plastic material of the frame.

The Office Action states that it would have been obvious "to have integrated the antenna into the plastic since such a modification would not affect the performance of the antenna, nor does it solve any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one having ordinary skill in the art and it has been held that the term "integral" and its derivative is sufficiently broad to embrace constructions united by such means as fastening and welding". However, this is not a reason that would have prompted a person of ordinary skill in the relevant field to modify Stiehl to provide that an antenna body and the plastic material of the frame are integrally molded such that the antenna body is embedded in and completely surrounded by plastic material of the frame.

One of ordinary skill in the art would find no need to modify Stiehl to provide this feature. The Examiner has stated that the antenna of Stiehl, when mounted into the vehicle, is sandwiched between the plastic frame 12 and the vehicle in which the frame structure is mounted. Thus, the Examiner contends that the antenna would be completely surrounded and therefore would meet the applicants' need of not being

affected by deterioration by environmental influences. However, Stiehl teaches that the gasket 86 seals off the air vent so that the antenna is accommodated in the vehicle safe from physical damage (see paragraph [20]). Thus, the antenna is protected from physical damage due to the gasket, but there is no reason that would prompt a person of ordinary skill in the relevant field to completely surround the antenna by the plastic material of the frame itself. Also, since the antenna in Stiehl is mechanically attached to the frame and is protected from physical damage by virtue of the gasket, one of ordinary skill in view of Stiehl could be lead away from modifying Stiehl to completely surround the antenna by the plastic material of the frame.

Further, paragraph [0003] of Stiehl states that the object of the invention is to accommodate an antenna in a vehicle so that it has good transceiver performance while being simple to fit. Stiehl also requires that there is a connector plug or mounting opening 60 to center the antenna 62 on the frame. Yet, having an antenna fitted to the frame 12 in the manner disclosed by Stiehl so as to achieve a simple fit is entirely different than providing an antenna embedded in a frame so as to completely surround the antenna with the plastic material of the frame.

Moreover, it is respectfully submitted that the feature with respect to the antenna body and the plastic material of the frame being "integrally molded" is not simply an obvious matter of design choice, as concluded by the Examiner on page 4 of the Office Action of March 12, 2007. Sufficient reasoning must be provided to substantiate the claim of obvious design choice. For example, the U.S. Court of Appeals for the Federal Circuit in In re Chu, 55 F.3d 292, 36 USPQ2d 1089, 1095 (Fed Cir. 1995) held that placement of a SCR catalyst within a bag retainer would

not have been merely a matter of "design choice", since there is no teaching or suggestion in the prior art that would lead one of ordinary skill in the art to modify the structure of the Szymanski reference to place the SCR catalyst within a bag retainer as opposed to between two filter bags as disclosed in Szymanski, and since Chu's technical evidence relating to the frailty of fabric filters during pulse-jet cleaning clearly counters the assertion that placement of the catalyst in the baghouse is merely a "design choice."

The Office Action does not provide sufficient reason to substantiate the claim of obvious design choice with respect to the antenna body and the plastic material of the frame being "integrally molded". The Examiner states that Stiehl discloses an antenna (62) that when mounted into the vehicle, the antenna will be sandwiched between the plastic frame structure (12) and the vehicle in which the frame structure is mounted. The antenna will be completely surrounded and therefore meet the applicants need of not being affected by deterioration by environmental influences. The Examiner then argues that this clearly shows that the applicant's condition can be met without having to be integrally molded into the plastic and it is for this reason that the "integrally molded" is an obvious matter of design choice (see Pages 3 and 4 of the Office Action of March 12, 2007).

This is not a suggestion or reason that would prompt a person of ordinary skill in the relevant field to modify Stiehl to provide that the antenna 62 and the plastic material of the frame structure 12 are integrally molded. The Examiner even admits that Stiehl's current structure already prevents the antenna from being deteriorated by environmental influences. One of ordinary skill in the relevant field would not be prompted to modify Stiehl to provide that the antenna 62 and the plastic material of

the frame structure 12 be integrally molded to prevent the antenna from being deteriorated by environmental influences, because the current structure of Stiehl already solves this problem.

Therefore, there would not be a reason that would have prompted a person of ordinary skill in the art to modify Stiehl to provide that an antenna 62 and the plastic material of the frame 12 are integrally molded such that the antenna is embedded in and completely surrounded by plastic material of the frame.

Claims 7 and 8 depend from claim 6 and are therefore allowable as depending from an allowable claim and for the specific features recited therein.

B. Conclusion

In view of the foregoing, the rejection of claims 6-8 under 35 U.S.C. 103(a) as being unpatentable over Stiehl is improper and should be reversed. Reversal of the rejections of claims 6-8 is respectfully requested.

VIII. CLAIMS APPENDIX

Appendix A attached contains a copy of the claims on appeal.

IX. EVIDENCE APPENDIX

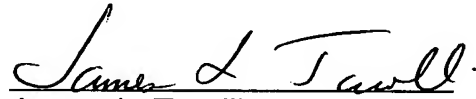
There was no evidence relied upon in this brief that was submitted under 37 CFR §1.130-1.132, or otherwise submitted and entered into the record by the Examiner.

X. RELATED PROCEEDINGS APPENDIX

There are no related appeals, interferences or judicial procedures under 37 C.F.R §41.37 91)(i)(ii).

Please charge any deficiency or credit any overpayment in the fees for this
Appeal Brief to Deposit Account No. 20-0090.

Respectfully submitted,

A handwritten signature in cursive script, reading "James L. Tarolli".

James L. Tarolli
Reg. No. 36,029

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APPENDIX A

Claims 1-5 (Canceled)

Claim 6 (Previously Presented) A vehicle body air vent comprising:

a frame molded of a plastic material for mounting onto a vehicle body;

and

an antenna with an antenna body, wherein the antenna body and the plastic material of the frame are integrally molded by injection-molding such that the antenna body is embedded in and completely surrounded by the plastic material of the frame.

Claim 7 (Previously Presented) The vehicle body air vent according to claim 6, wherein in addition to the antenna an electric or electronic component of one of the following is provided:

an antenna microstrip,

a connect plug, and

a sensor.

Claim 8 (Previously Presented) The vehicle body air vent of claim 6, wherein the frame is generally rectangular with a plurality of ribs spanning two opposed frame sections, and the antenna consists of a T-shaped metallic body with a first branch spanning the opposed frame sections and a second branch extending along one of the opposed frame sections.

Claims 9-12 (Canceled)

EVIDENCE APPENDIX

There was no evidence relied upon in this brief that was submitted under 37 C.F.R. §§1.130-1.132, or otherwise submitted and entered into the record by the Examiner.

RELATED PROCEEDINGS APPENDIX

There are no related appeals, interferences, or judicial procedures under 37
C.F.R. §41.37(1)(c)(ii).